

RURAL DEVELOPMENT

**Statement of Thomas C. Dorr, Under Secretary
before the Subcommittee on Agriculture, Rural Development, and Related Agencies**

Mr. Chairman and members of the Subcommittee, it is a distinct pleasure for me to appear today to discuss USDA Rural Development's conservation, renewable energy, and energy efficiency programs and activities. I particularly appreciate the Subcommittee's invitation to provide a comprehensive overview of our activities in this area. I will therefore be addressing a broader range of issues and initiatives than I would normally discuss before this Subcommittee.

All of us recognize the strategic imperative of reducing our dependence on imported oil, the environmental concerns surrounding fossil fuel use, and the importance of conservation. All of us, I am sure, also understand the immense potential of renewable energy for spurring growth, jobs, and wealth creation in rural America. I appreciate this opportunity to testify and I look forward to working with this Subcommittee to advance these important objectives.

Conservation and renewable energy are high priorities for our Nation. They have been high priorities for both President Bush and the Congress over the past six years. On

renewable energy in particular, we are making significant progress: installed wind capacity in the United States has quadrupled since 2000; ethanol production has more than tripled; and biodiesel production has soared over 100-fold. Several solar technologies are also growing rapidly.

The international comparisons are telling. Long an also-ran in renewable energy development, the U.S. is now the world leader in ethanol. We trail only Germany in biodiesel, and we are growing fast. According to the Global Wind Energy Council, we led the world in wind capacity added in 2005 and 2006. In total installed wind capacity we are now essentially tied with Spain for second place behind Germany: 20,622 MW (Germany) vs. 11,615 MW (Spain) vs. 11,603 MW (U.S.) at the end of last year. Again, our progress in this decade has been very rapid.

This is, however, not a race against other nations. It is a race against our own potential. The renewable fuels revolution is still in its infancy. A wide range of renewable energy and energy efficiency technologies are in play. Several of these – ethanol, cellulosic ethanol, biodiesel, and wind – involve a predominately rural resource base. That is why USDA Rural Development is involved.

The Administration's proposals, both for the 2007 Farm Bill and the Fiscal Year (FY) 2008 budget, include important new initiatives in this area. These build on the comprehensive energy strategy outlined by the President in 2001, the Energy Title of the 2002 Farm Bill, the Energy Policy Act of 2005, and the Advanced Energy Initiative

announced last year. We are no longer at the starting line; we are some distance down the track and picking up speed.

The growth of renewable energy has been encouraged by several factors: the rise in global oil and natural gas prices; the emergence of major new energy consumers in international markets; improvements in technology; and supportive federal and state policy. We must now sustain. It is imperative we sustain – and indeed accelerate – this progress in the years ahead.

USDA Energy Council

USDA has a significant role to play in this effort. The 2008 budget requests \$397.4 million across USDA for bioenergy and renewable energy programs. These activities include commercialization, research and development, education and outreach, and energy efficiency and conservation. The Agricultural Research Services (ARS); Cooperative State Research, Education and Extension Service (CSREES); Forest Service; Economic Research Service (ERS); National Resources Conservation Service (NRCS); Office of the Chief Economist; and Rural Development all have significant activities in these areas.

In December 2005, Secretary Johanns formed the **USDA Energy Council** to better coordinate USDA's myriad energy and energy conservation activities across the Department and with other federal agencies. As Under Secretary for Rural Development,

I am the Chair of the Energy Council. Under Secretary Mark Rey and Chief Economist Keith Collins, who are testifying with me today, are the Vice Chairs. The breadth and variety of USDA's involvement is remarkable.

- Dr. Collins administers the **Biodiesel Education Program**. Under Secretary Rey administers the diverse contributions of the Forest Service and the **Natural Resources Conservation Service**. I will review **Rural Development's** activities. Each of us will discuss our own agencies' programs in some detail. In addition, as Chairman of the Energy Council, I would like to briefly acknowledge the important contributions of our sister agencies that are not directly represented today.
- The **Agricultural Research Service (ARS)** and **Cooperative State Research, Education, and Extension Service (CSREES)** conduct or sponsor research on a wide variety of subjects, including many that are energy related. Their work has allowed American producers to steadily improve yields, increase drought resistance and reduce the intensity of fertilizer, herbicide and pesticide use. This translate into fewer passes over the fields and thus lower fuel usage; lower water and power consumption due to reduced irrigation; and reduced energy inputs in the form of agricultural chemicals. These are significant conservation and energy efficiency benefits.

In addition, ARS and CSREES are playing key roles in the accelerating effort to improve ethanol conversion efficiencies, optimize feedstocks for energy production,

and overcome the barriers to cellulosic ethanol production. These are major research priorities with important long-term implications for the Nation's energy posture.

- USDA's **Office of Departmental Administration** works to reduce USDA's fossil fuel consumption and increase our use of biofuels and biobased products.
- Finally, the **Farm Services Agency** administers the **Conservation Reserve** and **Conservation Reserve Enhancement Programs**. CRP and CREP have traditionally been considered environmental, not energy programs; they are designed to conserve the Nation's natural resources by reducing soil erosion, enhancing water quality, and providing wildlife habitat. As a matter of budget scorekeeping, they are not listed in USDA's energy crosscut. However, as a cellulosic ethanol is commercialized in the near- to intermediate future, CRP and CREP lands may begin to assume a significant energy role in the production of dedicated energy crops. This prospect is raised in the President's Farm Bill proposals and we will be happy to discuss it with you at an appropriate time.

Rural Development

I will now turn to USDA Rural Development. Rural Development administers a wide range of housing, infrastructure, business, and community facilities programs. The President's FY 2008 budget requests an overall discretionary budget authority of \$2.05 billion to support a program level of \$14.873 billion in these areas. Renewable energy, and energy efficiency, related activities are present in most Rural Development program

areas. This includes some activities that have not traditionally been defined as “energy” or “conservation” programs but which nonetheless have significant energy implications.

Business and Cooperative Programs: For FY 2008, the President’s budget proposes \$112 million in budget authority to support \$1.308 billion in grants, loans, and loan guarantees for Rural Development’s Business and Cooperative Programs. These support a wide range of business development, community capacity building, and technical assistance initiatives.

Renewable energy and energy efficiency are priorities across this entire program area. Since 2001, eight different Business and Cooperative programs have invested in projects involving wind, biodiesel, ethanol, methane gas recovery, biomass, geothermal, and hydrogen technologies as well as research on cellulosic ethanol.

- **The Renewable Energy and Energy Efficiency (Section 9006) Program:** This program is statutorily targeted on energy-related investments. For FY 2008, the budget requests \$34 million in budget authority to support \$195 million in Section 9006 loan guarantees and \$15 million in Section 9006 grants.
- **Energy Investment by Other Business and Cooperative Programs:** In addition to the Section 9006 Program, Secretary Johanns has directed that every Rural Development business and cooperative program have a priority on energy and energy efficiency. These programs continue on a competitive basis to finance a

broad spectrum of projects, so it is not possible to project the share of funding that will be awarded to energy related projects in FY 2008. Past experience, however, provides some guide.

From FYs 2001 through 2006, for example, Rural Development has invested over \$480 million in 1134 renewable energy and energy efficiency projects, \$349 million of this total has been invested thru Business and Cooperative Programs. Another \$119.1 million has been invested through the Rural Electric Program, and \$22.1 million has been provided through the High Energy Cost grant program. The Section 9006 Program accounted for over 800 of the individual projects but less than one-quarter of the total funding. This is an across-the-board priority.

- **Energy Infrastructure Issues:** The development of large scale, distributed renewable energy industries will also require construction of a supporting business infrastructure. The ripple effect is very large. The President, for example has proposed a target of a 35 billion gallon renewable fuels standard by 2017. Meeting this goal is likely to require significant new investments in water, electric, pipeline, trucking, and rail infrastructure as well as the expansion of construction and support industries in rural areas. Our Business and Cooperative Programs stand ready to support rural entrepreneurs in engaging with these emerging opportunities. As a provider of technical assistance, Rural Development is also studying a wide range of issues related to the rapid development of rural

renewable energy including regulatory and logistical barriers, business and investment models, and technical issues related to the integration of large scale distributed power generation into the grid.

While these activities will not appear on the “energy investment” budgetary scorecard, they will in fact significantly enhance the ability of rural entrepreneurs to participate in the myriad opportunities driven by the emergence of major new energy industries in rural America.

Housing and Community Facilities Programs: Rural Development’s Housing and Community Facilities programs support single family homeownership, affordable multi-family housing, expanded opportunities for low-income and minority homeownership, and a wide range of critical community services. The FY 2008 budget requests budget authority of \$714 million to support \$6.261 billion in grants, loans, and loan guarantees for these purposes.

While not typically categorized and discussed as “energy” programs, our Housing Programs are energy conscious. Our programs conform to the Model Energy Code and in most localities the International Building Code as well. We provide financial incentives for meeting the stricter energy efficiency standards and for additional energy efficiency investments.

- **Single Family Energy Conservation:** The Rural Energy Plus Pilot Program became effective nationwide in June 2006, and provides special eligibility

consideration for low- and moderate-income applicants to the Rural Development Section 502 homeownership loan program. Under the pilot program, if eligible applicants are purchasing a newer, energy-efficient home, they will receive an increase of up to two percentage points on the qualifying ratio used to determine their ability to repay a home loan. This relaxes the underwriting requirements – because utility costs are expected to be lower – and makes it easier for a low-income family to qualify for their first home loan. Any home that meets the 2000 International Energy Conservation Code (IECC) or a subsequent comparable code is considered energy efficient.

- **Multi-Family Energy Conservation:** Properties being rehabilitated under the **Rural Development Section 538 Multifamily Preservation and Revitalization Restructuring** that include an alternative energy component such as windmills or geothermal heating systems are provided with special eligibility consideration. Properties undergoing restructuring and rehabilitation are thus incentivized to add an alternative energy component to their plans.

Under the program, Rural Development will finance the alternative energy system. This special consideration encourages efforts to expand access to property rehabilitation, while emphasizing the importance of energy conservation.

Utilities Programs: For FY 2008, the President’s budget proposes \$538 million to support \$6.619 billion in rural electric, telecommunications, water, and waste disposal

infrastructure. These programs support the Nation's renewable energy and conservation goals in several ways.

- **Rural Electric Programs:** The Rural Electrification Administration was created in 1935 to meet the challenge of providing modern infrastructure to a dispersed population across great distances. That challenge remains today: USDA Rural Development borrowers sell 6.95 percent of the electricity sold in the United States, but they do this in a service area spanning 80 percent of the Nation's landmass. The FY 2008 budget requests a program level of \$4.1 billion for rural electric program loans. Because of the extremely high performance of the electric loan portfolio, this program level is supported by a requested budget authority of just \$120,000.

Energy Efficiency. Rural Development's Electric Program recognizes that energy efficiency and conservation are important means of moderating the growth of power demand and, therefore, demand for new generation facilities. As a matter of routine practice, our program staff requires borrowers to include energy efficiency and conservation forecasts in load forecasts.

Rural electric cooperatives (REC's) have historically been oriented toward maintaining low consumer rates rather than maximizing margins. As a result, REC's are recognized industry leaders in demand side management. Techniques include energy audits of homes and farms, promotion of energy efficient

technologies, demand side metering, automated meter reading, time of use billing, and automated load management to shave usage at peak times.

Renewable Energy Development. Rural electric cooperatives (RECs) are also becoming strategic partners in innovation. While most electric generation will be powered by coal, nuclear, and natural gas for many years to come, an increasing number of RECs are now exploring renewable energy options, particularly wind.

USDA Rural Development has funded REC renewable energy projects on a case-by-case basis. Since FY 2001, the Rural Development Electric Program has invested over \$119.1 million in 15 renewable energy projects including wind, solar, anaerobic digesters, hydropower, and landfill gas recovery technologies. We will continue to welcome opportunities to cooperate with RECs in this area and are prepared to use a variety of program platforms to do so.

- Transmission Issues. Finally, it should be noted that wind and solar are inherently distributed resources. Large scale distributed generation will create both capacity and integration challenges for the existing electric grid. This is likely to add to the financing needs of REC's in the year ahead and we anticipate a continuing dialogue with Congress to ensure that evolving rural infrastructure needs continue to be met.

Water and Waste Disposal Program: Since the Subcommittee has expressed an interest in conservation as well as energy activities, it is important to also mention Rural Development's Water and Wastewater Program. Loans and grants under the Water and Waste Disposal program provide clean, safe drinking water and ecologically sound disposal of waste. This protects human health both today and in the future. It also directly supports the Nation's environmental and water conservation objectives. In FY 2006, Rural Development financed 432 wastewater projects and 688 water projects for a program total of \$1.5 billion.

For FY 2008, nearly \$1.1 billion in direct loans, \$75 million in guaranteed loans, and \$349 million in grants are requested for water and water disposal projects. These funds will provide modern water and waste disposal services to approximately 550,000 rural residents.

Telecommunications Program: The Rural Development Telecommunications Program also has significant although indirect energy implications. Information technology drives efficiency across all sectors of the economy. Rural America is no exception. Investments in rural broadband improve efficiencies in transportation and manufacturing. By accommodating decentralized forms of organizations, they allow us to disperse jobs, develop employment centers in small communities, and reduce commutes. I cannot put a "gallon of gas" or "kilowatt hours saved" figure on these economies, and we do not score rural broadband as an "energy" program. Nonetheless, it is important to acknowledge

that information technology and broadband are important contributors to greater energy efficiency.

For FY 2008, the budget provides \$4 million in budget authority to support \$690 million in telecommunications loans. All telecommunications infrastructure financed by Rural Development is broadband capable. In addition, the budget requests \$25 million for Distance Learning and Telemedicine Grants and \$6 million in budget authority to support \$300 million in Broadband Program loans.

Farm Bill Initiatives

Finally, the Administration's Farm Bill proposal contains several initiatives that will greatly enhance our efforts in renewable energy and conservation. Pending enactment of the 2007 Farm Bill, funding for these initiatives is included in the Commodity Credit Corporation section of the budget request.

- **Water and Waste Disposal:** The Farm Bill requests \$500 million over 10 years to reduce the backlog in some Rural Development programs, included the Water and Waste disposal program. As noted earlier, investments in rural water and wastewater systems yield tangible environmental and conservation benefits.
- **Energy:** The Farm Bill proposal includes more than \$1.6 billion over 10 years in new renewable energy funding. The proposal also targets an increased share of

this funding to cellulosic ethanol projects. These initiatives cut across several USDA Mission Areas. The major initiatives for Rural Development include:

- \$500 million for a Bioenergy and Biobased Product Research Initiative. Approximately \$50 million a year in mandatory funding will support a USDA bioenergy and biobased products laboratory network utilizing existing USDA research facilities as well as engaging universities through a competitive process and connecting them to the USDA lab network.
- \$500 million over 10 years for the Renewable Energy and Efficiency Improvements Grants Program; and
- \$210 million over 10 years for the Renewable Energy and Efficiency Improvements Loan Guarantee Program to support an estimated \$2.1 billion in loan guarantees for cellulosic ethanol projects in rural areas.

The remaining \$390 million in the Farm Bill energy package will fund a wide variety of programs elsewhere across USDA, including a proposed Cellulosic Bioenergy Program, an expansion of the BioPreferred program, a proposed biomass reserve program within the CRP, increased funding for bioenergy, bioproducts, and biomass research in several USDA agencies.

The 2007 Farm Bill proposal also calls for a consolidation and streamlining of Rural Development programs. In preparation for this we have been working closely with the Office of Management and Budget on a proposed rule to consolidate and streamline the common elements of our loan guaranteed programs with our existing authorities. This rule will be published in the Federal Register for public comment. I would emphasize that we are committed to supporting renewable energy and energy efficiency projects across our full range of programs and have demonstrated a capacity to use different platforms to advance these goals. Streamlining and simplification of our program structure will enhance our ability to do so in the future.

Conclusion

Renewable energy, energy efficiency, and conservation are high priorities for this Administration and for USDA Rural Development. We also recognize that renewable energy is a critical national security issue. It is an environmental and economic security issue. It is also perhaps the greatest opportunity for economic growth and wealth creation in rural America in our lifetimes. We are committed to realizing that potential.

We have built significant momentum on renewable energy in recent years and I appreciate the generous support of this Subcommittee for these efforts. We are in the very early stages of an historic transformation, and we look forward to working with you to ensure that rural America continues to share fully in the extraordinary opportunities that lie ahead.

Thank you.